



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,916	05/15/2001	Pil-sang Ju	Q64442	7573

7590 06/17/2005
SUGHRUE, MION, ZINN
MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, NW
Washington, DC 20037-3213

EXAMINER

YENKE, BRIAN P

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/854,916

Applicant(s)

JU ET AL.

Examiner

BRIAN P. YENKE

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment (28 March 2005).
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's arguments filed 28 March 2005 have been fully considered but they are not persuasive.

Applicant's Arguments

a) Applicant states Tajima and Lea are not unpatentable over the applied references, since Tajima discloses modules that perform different functions that can be mounted together in a television, there is no suggestion to modularize and physically combine a plurality of devices forming a computer network which exhibits a controlling function. Also, the applicant states Tajima is not an analogous art, and that the examiner is using hindsight reconstruction.

b) With respect to claims 4, 23, 24, 35 and their dependent claims, recite the use of an internet base communication protocol, so these devices can communicate with any internet compatible device located at any location around the world.

Examiner's Response

a) The examiner disagrees. As stated in the rejection Lea discloses a system which control/operates in a HAVI environment (plug and play). Lea was incorporated to show that a A/V system (i.e. TV) can include modules/racks which can be inserted/removed into the system via card/module, which would provide the user/designer the option of adding on/upgrading a system and at the same time eliminate the wired connections to connect multiple devices.

Regarding analogous art, the examiner disagrees since Tajima provides an A/V system which is able to incorporate removeable/insertable modules/cards. The examiner also recognizes that the applicant's own figures include a A/V system (television) which includes removeable/insertable modules/cards. It is also noted that the applicant own IDS submitted on 28 Aug 04, included the Tajima reference.

In response to applicant's argument that Tajima is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Tajima is in the field of endeavor as stated above.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

b) The examiner took "OFFICIAL NOTICE" in response to the use of an internet based communication protocol. The examiner would like the applicant to clarify on the record, what part of the protocol was invented by the applicant. The use of an IP

address is notoriously well known, thus the examiner would like the applicant to clarify, how this invention is different from a conventional IP address in communicating with devices.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lea, US 6,052,750 in view of Tajima, JP6-169440.

In considering claims 1, 9, 14 and 25, 27-28 and 39-41

Art Unit: 2614

a) the claimed one or more function-extending modules... is met by modules which are connected to set top box 301 (where the control device may be a television col 6, line 56-66) via a network, such as DVD 402, TV 302, Digital Camera 304, VCR 303 and satellite receiver 501 (Fig 4,5) and any new consumer electronic devices that is coupled to the user's home AV system. When a new device is connected, the device is queried (col 2, line 63 to col 4, line 18), and the device provides a predefined, standardized set of control interfaces for the device.

b) the claimed a based module for receiving the control information is met where the controller would obtain the user interface and control program for each external device.

Regarding the module rack into which function-extending modules are detachably inserted, Lea does not disclose the system utilizes racks/modules.

Lea discloses a system which can operate as an HAVI network, which supports "Plug and Play".

However, the use of racks/module which can be detachably inserted into a module are conventional in the art, based upon the choice of the designer/user.

The examiner incorporates Tajima, which discloses a television unit which includes a rack where modules can be inserted/removed (Fig 1, 2), which provides a system which overcomes any burden in connecting a plurality of wires/cables with traditional devices.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lea which discloses a home networking system which allows a user to control a multitude of external apparatuses via a controller, by utilizing a

system which allows the user to connect/disconnect a particular device by the connection/removal of a card, which would allow the user to connect the devices without the burden of connecting cables/wires, and would also provide the user the ability to upgrade/replace modules on the fly.

In considering claims 2-3 and 15,

Lea discloses a system where the devices send the control/display information that is required for the external device to the controller, where the controller will then display the information of the device ((Fig 12a,12b), which would allow the user to select a particular device and function of that device.

In considering claims 4, 6, 10-11, 16-17, 29, 31 and 34-36

As discussed above with respect to claims 1-2, Lea discloses that each external apparatus includes a set of standardized set of control interface for the device.

However, the combination Lea and Tajima does not explicitly recite the storing/providing of an IP address.

Lea/Tajima discloses a modular system which provides the control information to the controller which is then displayed in order for the user to operate the device.

The use of an IP address/browser between a controller and external device is a conventional in the art, where the user may operate a plurality of devices from the use of a web page of a particular device.

Thus the examiner takes "OFFICIAL NOTICE" regarding such a system.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lea and Tajima which disclose a modular home

networking system where the user may add/remove apparatus by using cards if desired, by allowing the devices to communicate to each other via a conventional scheme such as IP addresses which would allow the user to operate the device via the devices web/homepage.

Regarding the dividing the A/V data and audio and video units, based upon the device, where if the device includes audio/video (i.e. TV, DVD) these are inherent features.

In considering claims 5, 8, 12, 18, 20-22, 30, 33 and 37

Lea discloses the communication between the devices utilizing the 1394 interface between devices, where the interface 608 receives the MPEG stream from MPEG unit 607 (Fig 6).

In considering claims 7 and 32

The combination of Lea/Tajima does not explicitly recite a mixing unit for overlapping data.

Lea discloses a home networking device which allows the interactivity with a plurality of devices and the incorporation of new devices in the system.

However, the mixing of two signals or overlapping of data is conventional in the art (i.e. PIP or text overlays, OSD) since a user would desire to view or operate more than one channel/device at a time.

Thus the examiner takes "OFFICIAL NOTICE" to such a device.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lea/Tajima which disclose a modular home networking

system where the user may add/remove apparatus by using cards if desired and operate multiple apparatus and view TV programs/channels, by allowing the user conventional freedom/choice in viewing/operating more than one channel/device at a time, thereby giving the user enhanced operability in the home.

In considering claims 13, 24, 26 and 38

The combination of Lea/Tajima does not explicitly recite the use of a TCP/IP protocol.

However, the TCP/IP protocol is a widely known standard communications/control protocol which is used to ensure communications between devices.

Thus the examiner takes "OFFICIAL NOTICE" to such a protocol.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lea/Tajima which disclose a modular home networking system where the user may add/remove apparatus by using cards if desired, by allowing the networked devices to send/receive data by ensuring the data was received/sent by utilizing a communications protocol which guarantees delivery/receipt of information.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure—see newly cited references on attached form PTO-892.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Yenke whose telephone number is (571)272-7359. The examiner work schedule is Monday-Thursday, 0730-1830 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, John W. Miller, can be reached at (571)272-7352.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703)305-HELP.

General information about patents, trademarks, products and services offered by the United States Patent and Trademark Office (USPTO), and other related information is available by contacting the USPTO's General Information Services Division at:

800-PTO-9199 or 703-308-HELP

(FAX) 703-305-7786

(TDD) 703-305-7785

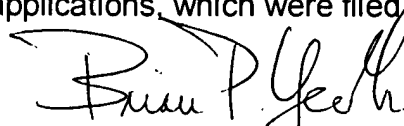
An automated message system is available 7 days a week, 24 hours a day providing informational responses to frequently asked questions and the ability to order certain documents. Customer service representatives are available to answer questions, send materials or connect customers with other offices of the USPTO from 8:30 a.m. - 8:00p.m. EST/EDT, Monday-Friday excluding federal holidays.

For other technical patent information needs, the Patent Assistance Center can be reached through customer service representatives at the above numbers, Monday through Friday (except federal holidays) from 8:30 a.m. to 5:00 p.m. EST/EDT.

The Patent Electronic Business Center (EBC) allows USPTO customers to retrieve data, check the status of pending actions, and submit information and applications. The tools currently available in the Patent EBC are Patent Application Information Retrieval (PAIR) and the Electronic Filing System (EFS). PAIR (<http://pair.uspto.gov>) provides customers direct secure access to their own patent application status information, as well as to general patent information publicly available. EFS allows customers to electronically file patent application documents securely via the Internet. EFS is a system for submitting new utility patent applications and pre-grant publication submissions in electronic publication-ready form. EFS includes software to help customers prepare submissions in extensible Markup Language (XML) format and to assemble the various parts of the application as an electronic submission package. EFS

Art Unit: 2614

also allows the submission of Computer Readable Format (CRF) sequence listings for pending biotechnology patent applications, which were filed in paper form.



BRIAN P. YENKE
Primary Examiner
Art Unit 2614



B.P.Y.
15 June 2005